

California High-Speed Rail Authority  
Sustainability Plan Summary: Priorities, Commitments, Objectives, Metrics, Strategies & 2018 Status

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Priority	Authority Commitments from Sustainability Policy and Prop 1A and Other Regulations	Objectives	Metrics	Strategies	2018 Status
Energy	Net-zero Energy, LEED Platinum Facilities (Policy, CalGreen)	Reinforce a clean energy economy through the use of on-site renewable energy systems at stations.	Annual energy produced by on-site renewable energy systems (ekWh).	Source cost-efficient renewable energy from third party providers, produced energy on site. Construct high-performance, low-energy buildings.	In process
	Net-zero greenhouse gas and criteria pollutant emissions in construction (Policy)	Strengthen public health by improving air quality.	Percentage of fleet vehicles that are Tier 4.	Voluntary emissions reductions strategies to bring construction emissions to net-zero. Construction requirements for Tier 4.	In process
			Tons of offsets completed by San Joaquin Air District. Comparison of construction site emissions vs. baseline .		
			Number of trees planted in disadvantaged communities.	Voluntary offsets for construction GHG emissions with public health co-benefits.	In process
	Net-zero greenhouse gas and criteria pollutant emissions in construction. Operating the system entirely on renewable energy. (Policy)	Maximize the consumption of renewable fuels to the extent feasible.	Percent of total annual operational energy supplied through on-site and off-site renewable energy.	Design facilities and systems to be zero net energy ready, minimize energy demand through efficiency measures, source renewable energy.	In process
			Percentage of energy used during construction sourced from renewable energy systems.	Reduce energy use and emissions from construction through required efficiency measures and requirements for renewable fuels.	In process
	Prioritizing life-cycle considerations. (Policy)	Promote long-term energy price stability.	Percent of energy contracts with optimal life-cycle cost score.	Procure energy for operation through wholesale agreements and multi-year contract terms.	In process
	Prop. 1A.	Reduce Vehicle Miles Traveled (VMT).	Vehicle Miles Traveled (VMT).	Reinforce first and last mile transit and transit connectivity to system. Complete SWOT analysis for access at station. Operate system according to Reliability, Availability, Maintainability and Safety (RAMS) to reinforce ridership.	In process
Communities & Ridership	Prop 1A. SB 375	Provide convenient station access to all high-speed rail station areas.	Percent of stations with station area plans.	Use station area planning funding agreements to enable station cities to complete necessary planning activities.	In process
			Quantitative score of station area against the five "P"s: People, Places, Physical Form, Performance, Pedestrian & Bicycle Connectivity.	Engage in state area planning with station communities.	In process
	SB 375.	Design and construct stations and infrastructure that reinforce Sustainable Community Strategies (Senate Bill 375).	All stations have stations reflecting area planning process with local municipalities that reinforce SB 375 land use projects.	Engage in station area planning with station communities.	In process
	Prop. 1A.	Promote livable development patterns through community partnerships.	Engage each station area and larger station region in planning to support local priorities and HSR.	Partner with station and surrounding communities to encourage supportive land use decision making. Update station area planning policy.	In process
			All project segments participating in Connected Communities Strategies.	Develop connected communities inventories for each project segment.	In process
	Prop. 1A.	Promote active transportation (e.g., walking and bicycling).	Numbers of bike racks per rider; number of direct sidewalks to the station site.	Include bike facility at station sites and directly connect stations with sidewalks through design criteria.	In process
				Partner with local active transportation organizations to develop supportive policies and identify active transportation facilities for state funding.	In process
	Prop. 1A.	Promote local and regional transit connectivity to high-speed rail stations.	Number of bus stops within half mile; adding bus stops with frequent service.	Engage in planning with local and regional transit providers.	In process
Sustainable Infrastructure	Employ leading-edge methods during construction (policy statement)	Design, construct, and operate infrastructure in conformance with Authority principles for sustainable infrastructure (see page 8 for list of Authority Principles for Sustainable Infrastructure).	Percentage of contracts that include sustainability provisions.	Include high-performance design and climate analysis requirements in design criteria manual and require relevant actions in construction contracts.	In process
			Percentage of procurements and design-build contracts that require sustainability actions.		
			All of infrastructure in conformance with Authority principles.	Develop and implement contractor sustainability requirements in procurement documents.	In process
	Net-zero Energy, LEED Platinum Facilities (Policy, CalGreen)	Design, construct, and operate facilities that cost-effectively achieve State of California and local energy and sustainability policies.	Percent of facilities designed to achieve zero net energy.	Develop sustainability goals and targets for operations.	In process
				Emphasize integrated design teams for facilities design.	In process
				Incorporate high performance design criteria to design criteria manual.	In process
	Planning for climate change adaption. (Policy)	Design, construct, and operate resilient systems and facilities that can adapt to changing climate conditions.	Design criteria incorporate climate adaption and resilience strategies. Percent of vulnerable assets with design analysis based on RCP8.5	Assess sustainable design strategies using a life-cycle cost model and sustainability value model.	In process
				Exposure assessments completed for relevant climate stressors that affect the systems.	In process
Natural Resources	Planning for climate change adaption. (Policy)	Protect employee and customer health during construction and operations.	Zero harm .	Require indoor air quality plan for construction (in compliance with CalGreen Code or LEED NC).	In process
				Implement safety management program.	In process
	Net-zero greenhouse gas emissions in construction (Policy)	Maximize reductions in greenhouse gas (GHG) emissions.	Total site energy (ekWh). Percent of site energy from renewables.	See: Source Renewable Energy, Construction Waste Management, Recycled Materials Strategy, Maximize energy efficiency.	In process
	Retain, protect, and enhance the environmental quality and biodiversity of the project area. (CalGreen.)	Restore and maintain ecosystem health.	Acres of habitat purchased.	Complete mitigation activities and procure habitat parcels.	In process
	Prop. 1A.	Reduce the demand for virgin natural resources through the use of recycled materials.	Percentage of recycled content in permanent construction materials (by cost).	Specify recycled content in design criteria.	In process
	Prop. 1A.	Conserve agricultural land.	Acres of agricultural land replaced in conservation easements.	Confirm and complete agricultural conservation easements.	In process
Business & Management	Net-zero greenhouse gas and criteria pollutant emissions in construction. (Policy)	Improve air quality.	Tons of ROG/VOC, PM, and NOx avoided on construction site compared to average California site.	Alignment planning to avoid bifurcation of parcels.	In process
				Requirement of Tier 4 equipment & reporting for VERA.	In process
	Prop. 1A.	Conserve, maintain, and restore habitat and wildlife corridors through landscape scale mitigation.	Number of wildlife crossings at key habitat point.	Review of habitats and migration patterns against alignments & regional team design work.	In process
	Prioritizing life-cycle considerations. (Policy)	Improve the economic value to Californians through increased access and mobility.	Percent of economic output by system investments.	Regional engagement with communities on system alignment. Complete economic reporting on periodic basis.	In process
		Achieve a self-sustaining financial structure.	Plan and design system to be functional without need for subsidy in operation.	Identify and select operations strategies that enable self-sustaining financial structure.	In process
	Program Management Plan	Achieve continual improvement of delivery and management.	Annual improvements of key performance indicators.	Implement and adhere to quality management program and Program Management Plan (PMP).	In process
			Annual improvement in construction metrics.	Maintain quality data reporting from construction site and incorporate findings into program models.	In process
	Prop. 1A.	Operate and maintain the system transparently and accountably.	Annual sustainability report that conforms to a third party framework.	Issue sustainability report annually using GRI standard.	In process
	Prop. 1A.	Maximize opportunity for private investment.	Amount of private investments in dollars.	Bring an early train operator on board; Complete an unsolicited proposal strategy/policy; Complete GRESB reporting annually to develop a track record of ESG reporting for potential investors.	In process
	Planning for climate change adaption. (Policy)	Incorporate adaptation considerations into investment decisions.	Adaption measures identified for critical assets.	Asset level vulnerability identification.	In process

The sustainability plan summary provides a snapshot of activities across the program that progress the delivery of the system. This document is periodically updated.